



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Ian Robert Appelbaum
Application No.: 10/615,552
Filing Date: July 8, 2003
Title: Magneto-Luminescent Transducer
Measurement System

Docket No. 129-001
Date: April 12, 2006
Group Art Unit: 2815
Examiner: Jerome Jackson, Jr.

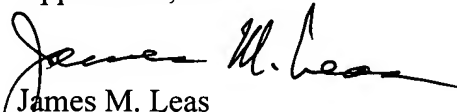
Information Disclosure Statement

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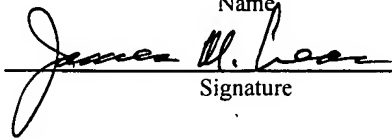
Sir:

Attached are IDS forms listing US patents, a US patent application, foreign patents, and papers. Copies of the foreign patents and papers are attached. A fee sheet for the IDS and a credit card form are attached. If there are any questions please call applicant's attorney at 802 864-1575.

Respectfully submitted,
For: Appelbaum, et al.

By: 
James M. Leas
Registration Number 34,372
Tel: (802) 864-1575

James M. Leas
37 Butler Drive
S. Burlington, Vermont 05403

CERTIFICATE OF MAILING	
I hereby certify that, on the date shown below, this correspondence is being:	
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Date: <u>4/12/06</u>	<u>James M. Leas</u> Name <u></u> Signature

129-001

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10/615,552



PTO/SB/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL For FY 2005		Complete If Known	
		Application Number	10/615,552
		Filing Date	7/8/2003
		First Named Inventor	Earl Robert Appelback
		Examiner Name	Jerome Jackson, Jr.
		Art Unit	2815
		Attorney Docket No.	129-001
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
TOTAL AMOUNT OF PAYMENT (\$)			

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☐ Deposit Account Deposit Account Number: _____ Deposit Account Name: _____

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☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

_____ - 20 or HP = _____ x _____ = _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

_____ - 3 or HP = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____	_____	_____

_____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

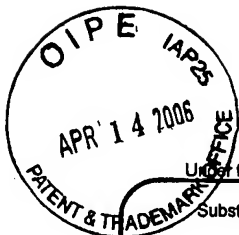
Non-English Specification, \$130 fee (no small entity discount) Fees Paid (\$)

Other (e.g., late filing surcharge): IDS \$180.00

SUBMITTED BY		Registration No.	Telephone
Signature	<u>James Marc Lees</u>	(Attorney/Agent) <u>34372</u>	<u>902864157</u>
Name (Print/Type)	<u>James Marc Lees</u>	Date	<u>4/12/06</u>

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/08A (07-05)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 3**Complete if Known**

Application Number	10/615,552
Filing Date	07/08/2003
First Named Inventor	Ian Robert Appelbaum
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	129-001

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 6154475	11/28/2000	Soref	
		US- 6031273	2/29/2000	Torok	
		US- 5973334	10/26/1999	Mizushima	
		US- 5432373	7/11/1995	Johnson	
		US- 5334854	8/2/1994	Ono	
		US- 5079774	1/7/1992	Mendez	
		US- 4800415	1/24/1989	Simmons	
		US- 4710936	12/1/1987	Shibata	
		US- 4473834	9/25/1984	Sociof	
		US- 2002/0085332	7/4/2002	Ide	
		US- 6340826	1/22/2002	Iliadis	
		US- 6493196	12/10/2002	Noma	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
		JP61270885A	12/1/1986	Mori		
		DE3225630A1	1/12/1984	Preissner		
		JP06-163983	6/10/1994	Jiee Kee Towainamu		
		JP01-185968	07/25/1989	Yamada Toshishige		
		JP61-231788	10/16/1986	Mori Yoshihiro		

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by Translation is attached. ⁶ Applicant is to place a check mark here if English language

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Application Number	10/615,552
Filing Date	07/08/2003
First Named Inventor	Ian Robert Appelbaum
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	129-001

Sheet 2 of 3**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		MONSMA, DJ, et al, Perpendicular Hot Electron Spin-Valve Effect in a New Magnetic Field Sensor: The Spin Valve Transistor, Physical Review Letters, Vol 74, no. 26 6/26/95	
		MARCO MASTRAPASQUA, et al, Light emitting charge injection transistor with p-type collector, Appl. Phys. Lett. 60 (19), 11 May 1992	
		MARCO MASTRAPASQUA, et al, Light emitting Transistor Based on Real-Space Transfer: Electrical and Optical Properties, IEEE Trans on Elect. Dev. vol 40, No. 2, Feb 1993	
		G.L. BELENKY et al, Collector-up light-emitting charge injection transistors in n-InGaAs /InAlAs/p-InGaAs and n-InGaAs/InP/p-InGaAs heterostructures, J.Appl.Phys.73(12) 6/15/93	
		J. GENOE, pnp resonant tunneling light emitting transistor, Appl. Phys. Lett. 61 (9) 31 August 1992	
		LUDMILA BAKUEVA et al, Multi-layer contacts for organic light-emitting diodes w/ enhanced injection eff., Organic optoelectronic Materials, MRS, SC Moss, Ed, v. 708, 2002	
		YIPING HE et al, Hybrid magnetic tunnel junction/vertical cavity surface emitting laser field sensor device, Electronics Letters, 11/22/01 vol. 37, no. 24	
		X. JIANG, et al, Optical Detection of Hot-Electron Spin Injection into GaAs from a Magnetic Tunnel Transistor Source, Phys Rev Let., V 90, No. 25, 27 June 2003	
		IAN APPELBAUM et al, Ballistic electron emission luminescence, Applied Physics Letters, Vol 82, No. 25, 23 June 2003	
		IAN APPELBAUM et al, Experimental test of the planar tunneling model for ballistic electron emission spectroscopy, Physical Review B 67 155307 (2003) 10 April 2003	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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First Named Inventor	Ian Robert Appelbaum
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	129-001

Sheet

3

of

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		K.J. RUSSELL et al, Room Temperature electro-optic up-conversion via internal photoemission, Applied Physics Letters, vol 82, No. 18, 5 May 2003	

Examiner
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